

**Jerash University**

**Faculty of Computer Science and Information Technology**

**Computer Sciences Department**

**Semester**: Fall Semester 2018/2019

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| **Course symbol and number:** 1002220 | **Course Name:** تحلبل وتصميم النظم  System Analysis and Design |
| **Teaching Language:** English | **Prerequisites:** .1001130  1002140 |
| **Credits:** 3 hours**.** | **Course Level:** 3 |

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| **Course Description** |
| This module introduces the students to the concepts and skills of system analysis and design. It includes expanded coverage of data flow diagrams, data dictionary, and process specifications. |

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| **Course Objectives** |
| This module aims to as to introduce variety of new software used by analysts, designers to manage projects, analyze and document systems, design new systems and implement their plans. It introduces also a recent coverage of UML, wireless technologies and ERP; web based systems for e-commerce and expanded coverage on RAD and GUI design. |

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| **Learning Outcomes** |
| Knowledge and understanding  - Understand the principles and tools of systems analysis and design  - Understand the application of computing in different context  - Understand the professional and ethical responsibilities of practicing the computer professional including understanding the need for quality |

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|  | **Text Book(s)** |
| **Title** | Systems Analysis and Design |
| **Author(s)** | Kenneth E. Kendall and Julie E. Kendall |
| **Publisher** | Prentice Hall PTR, |
| **Year** | 2001 |
| **Edition** | 5th Edition, |

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|  | **References** |
| **Books** | In addition to the above, the students will be provided with handouts by the lecturer. |
| **Internet links** | http://www.jpu.edu.jo/lms |
| **Course link** | [Click here](http://www.jpu.edu.jo/lms) |

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|  | **Instructors** |
| **Instructor** |  |
| **Office Location** | الطابق السادس - 611 |
| **Office Phone** | 666 |
| **E-mail** |  |

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| **Topics Covered** | | | |
| **Topics** | **Chapters in Text** | **Week number** | **Teaching hours** |
| System Analysis Fundamentals: Introducing  SA&D | **Chapter 1** | 1 | 2 |
| SA&D concepts, Roles of system analyst. | **Chapter 1** | 2 | 2 |
| The system development life cycle, Using  CASE tools. | **Chapter 2** | 3 | 2 |
| Depicting system graphically, determining  feasibility, activity planning and control. | **Chapter 2** | 4 | 2 |
| Information requirements analysis:  Sampling and investigating data, interviewing. | **Chapter 3** | 5 | 2 |
| Prototyping | **Chapter 4** | 6 | 2 |
| The analysis process  Using data flow diagram; Using data  dictionaries | **Chapter 4** | 7 | 2 |
| Describing process specifications and structured decisions; The system proposal. | **Chapter 5** | 8 | 2 |
| The essentials of design  designing output; designing input | **Chapter 6** | 9 | 2 |
| Designing the file or database  Designing the user interface | **Chapter 6** | 10 | 2 |
| Designing data | **Chapter 6** | 11 | 2 |
| Documenting the design phase | **Chapter 6** | 12 | 2 |
| Software engineering and implementation  Quality assurance through software engineering;  Implementing the information system | **Chapter 7** | 13 | 3 |
| Case Study. | **Chapter 11** | 14 | 2 |
| Review, Final Exam |  | 15+16 |  |
|  | Handout |  |  |

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|  | **Evaluation** |  |
| **Assessment Tool** | **Expected Due Date** | **Weight** |
| Programming assignments and LMS |  | 20 % |
| First Exam |  | 20 % |
| Second Exam |  | 20 % |
| Final Exam | According to the University final examination schedule | 40 % |

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|  | **Policy** |
| **Attendance** | Attendance is very important for the course. In accordance with university policy, students missing more than the allowed absence rate of total classes are subject to failure. Penalties may be assessed without regard to the student's performance. Attendance will be recorded at the beginning or end of each class. |
| **Exams** | All exams will be CLOSE-BOOK; necessary algorithms/equations/relations will be supplied as convenient. |

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| **Class Schedule & Room** |

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| **Office Hours** | | |
| Sun: 11 – 12.30  Mon: 11 - 12:30  Tues: 11- 12.30  Wed: 11 – 12:30 | | |
|  | \* Or by an appointment through email |  |

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|  | **Teaching Assistant** |
| To announced later on. |  |

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|  | **Prerequisites** |
| **Prerequisites by course** |  |